Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of preparing a polymerization catalyst comprising combining a bulky-ligand metallocene or a Group 15 containing polymerization catalyst with an alternating Group 14 and Group 16 containing oil or amorphous solid to form a catalyst solution or emulsion; wherein the alternating group 14 and Group 16 atom containing oil or amorphous solid is represented by the formulae:

$T\text{-}M(R^1)_2\text{-}Q\text{-}(M(R^2)_2\text{-}Q)_n\text{-}M(R^1)_2\text{-}T$ or

~~$T\text{-}M(R^1)_2\text{-}Q\text{-}(M(R^2)_2\text{-}Q)_n\text{-}(M(R^3)_2\text{-}Q)_m\text{-}Si(R^1)_2\text{-}T$~~

$T\text{-}M(R^1)_2\text{-}Q\text{-}(M(R^2)_2\text{-}Q)_n\text{-}(M(R^3)_2\text{-}Q)_m\text{-}M(R^1)_2\text{-}T$

wherein each T, R^1, R^2, and R^3 is independently selected from the group consisting of hydride, alkyl, alkoxy, aryl, substituted aryl, cycloalkyl, substituted cyclic alkyl, cyclic arylalkyl, substituted cyclic arylalkyl, heteroatom, vinyl, silyl, silyloxy, vinylsiloxy, haloaryl, haloalkyl, or vinylsilyl containing group; each M is independently an atom of Group 14 of the periodic table; each Q is independently an atom of Group 16 of the periodic table; and wherein n and m independently an integer between about 1 and 40,000.

2. (Original) The method of Claim 1, further comprising combining a scavenger.

3. (Original) The method of Claim 1, further comprising combining an activator composition.

4. (Original) The method of Claim 3, wherein the activator composition is a stoichiometric activator.

5. (Original) The method of Claim 1, further comprising heating the catalyst solution or emulsion during activation.

6. (Original) The method of Claim 5, wherein the catalyst solution or emulsion is heated to between about 30°C and about 250°C.

7. (Original) The method of Claim 5, wherein the catalyst solution or emulsion is heated to between about 40°C and about 100°C.

8. (Original) The method of Claim 1, wherein the weight ratio of oil or amorphous solid-to-weight polymerization catalyst is between about 1:10 to 100:1.

9. (Original) The method of Claim 1, wherein the weight ratio of oil or amorphous solid-to-weight polymerization catalyst is between 1:1 and about 70:1.

10. (Original) The method of Claim 1, wherein the catalyst solution or emulsion is further combined with a support or carrier.

11. (Original) The method of Claim 1, wherein a support or carrier is absent from the catalyst solution or emulsion as used in polymerizing olefins.

12. (Currently amended) A catalyst system comprising a bulky-ligand metallocene or a Group 15 containing polymerization catalyst and an alternating Group 14 and Group 16 atom containing oil or amorphous solid; wherein the alternating group 14 and Group 16 atom containing oil or amorphous solid is represented by the formulae:

$T\text{-}M(R^1)_2\text{-}Q\text{-}(M(R^2)_2\text{-}Q)_n\text{-}M(R^1)_2\text{-}T$ or

~~$T\text{-}M(R^1)_2\text{-}Q\text{-}(M(R^2)_2\text{-}Q)_n\text{-}(M(R^3)_2\text{-}Q)_m\text{-}Si(R^1)_2\text{-}T$~~

$T\text{-}M(R^1)_2\text{-}Q\text{-}(M(R^2)_2\text{-}Q)_n\text{-}(M(R^3)_2\text{-}Q)_m\text{-}M(R^1)_2\text{-}T$

wherein each T, R^1, R^2, and R^3 is independently selected from the group consisting of hydride, alkyl, alkoxy, aryl, substituted aryl, cycloalkyl, substituted cyclic alkyl, cyclic arylalkyl, substituted cyclic arylalkyl, vinyl, silyl, silyloxy, vinylsiloxy, haloaryl, haloalkyl, or vinylsilyl containing group; each M is independently an atom of Group 14 of the periodic table; each Q is independently an atom of Group 16 of the periodic table; and wherein n and m independently an integer between about 1 and 40,000.

13. (Original) The catalyst system of Claim 12, wherein M silicon or germanium.

14. (Original) The catalyst system of Claim 12, wherein M is silicon an Q is oxygen.

15. (Original) The catalyst system of Claim 12, wherein each T is independently a methyl, ethyl or vinyl group.

16. (Original) The catalyst system of Claim 12, wherein each R^1 and R^2 is independently a methyl or ethyl group.

17. (Original) The catalyst system of Claim 12, wherein in each R^3 is independently a halogenated or non-halogenated methyl, ethyl, propyl or phenyl group.

18. (Original) The catalyst system of Claim 12, wherein the Group 14 and Group 16 non-crystalline compound comprises a siloxane oil or combination of siloxanes oils having a viscosity of between about 100 cSt and about 500,000 cSt and a number average molecular weight between about 60 and about 100,000.

19. (Original) The catalyst system of Claim 12, wherein the catalyst system further comprises an activator.

20. (Original) The catalyst system of Claim 19, wherein the activator is a stoichiometric activator.

21. (Currently amended) The catalyst system of Claim 12, wherein the stoichiometric activator is represented by the formula:

$$(L\text{-}H)_d^+ (A^{d-})$$

wherein ~~L²~~ L is an neutral Lewis base;
H is hydrogen;
$(L\text{-}H)^+$ is a Bronsted acid;
A^{d-} is a non-coordinating anion having the charge d-; and
d is an integer from 1 to 3.

22. (Currently amended) The catalyst system of Claim 12, wherein the activator is selected from a group consisting of tri(n-butyl)ammonium tetrakis(pentafluorophenyl) borate, a trisperfluorophenyl ~~boron~~ borane metalloid precursor or a trisperfluoronaphtyl boron metalloid precursor, polyhalogenated heteroborane anions or a ~~combination~~ combinations thereof.

23. (Original) The catalyst system of Claim 12, wherein the catalyst system is a solution or emulsion.

24. (Original) The catalyst system of Claim 12, wherein the catalyst system is combined with one or more supports or carriers.

25. (Original) The catalyst system of Claim 12, wherein a support or carrier is absent from the catalyst solution or emulsion as used in polymerizing olefins.

26. (Original) The catalyst system of Claim 12, wherein the weight ratio of oil or amorphous solid-to-weight polymerization catalyst is between about 1:10 to 100:1.

27. (Original) The catalyst system of Claim 12, wherein the weight ratio of oil or amorphous solid-to-weight polymerization catalyst is between 1:1 and about 70:1.